

PTO/SB/08A (10-01)

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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/518,480
				Filing Date	December 20, 2004
				First Named Inventor	MIKHALTSEVITCH, ET AL.
				Art Unit	2862
				Examiner Name	Not Assigned Yet
				Attorney Docket Number	WRA0007-US
Sheet	1	of	4		

[illegible]

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>2</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
/LMA/		WO 92/17794	10/15/1992	British Technology Group		
↓		WO 93/11441	06/10/1993	British Technology Group		
		WO 96/26453	08/29/1996	British Technology Group		
		WO 99/19740	04/22/1999	BTG International Limited		
		GB 2 338 787	12/29/1999	Quantum Magnetics, Inc.		
		GB 2 200 462	08/03/1988	National Research Dev. Corp.		
		GB 2 255 414	11/04/1992	British Technology Group		<input type="checkbox"/>
↓		SU 1,831,680	7/30/1993	Kuznetsov et al.		<input type="checkbox"/>
		SU 1,824,559	06/30/1993	Kuznetsov et al. -		<input type="checkbox"/>
		International Search Report dated 8/4/2003				

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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
/LMA/		Flexman, et al., "The Detection of Explosives in Airport Luggage Using the Direct Nuclear Quadrupole Resonance Method," Detection of Bulk Explosives Advanced Techniques Against Terrorism, Proceedings of the NATO Advanced Research Workshop, held in St. Petersburg, Russia, 16-21 June, 2003, Series: NATO Science Series II: Mathematics, Physics and Chemistry, Schubert; Kuznetsov (Eds.) Vol. 138, 2004, p. 113-124	<input type="checkbox"/>
		Garroway, et al., "Explosives Detection by Nuclear Quadrupole Resonance (NQR)," SPIE Vol. 2276, 1994, pp. 139-149	<input type="checkbox"/>
		Garroway, et al., "Narcotics and Explosives Detection by 14N Pure NQR," SPIE Vol. 2092, 1993, pp. 318-327	<input type="checkbox"/>
		Chen and Slichter, "Zero-Field NMR Study on a Spin-Glass: Iron-Doped 2H-Niobium Diselenide," Physical Review B, Vol. 27, No. 1, 1 January 1983, pp. 278-292	<input type="checkbox"/>
		Vega, et al., "Cu Nuclear Quadrupole Resonance of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>x</sub> With Varying Oxygen Content," Physical Review B, Vol. 39, No. 4, 1 February 1989, pp. 2322-2332	<input type="checkbox"/>
		Kreis, et al., "Low Frequency Pulse Excitation in Zero Field Magnetic Resonance," J. Chem. Phys., Vol. 89, No. 11, 1988, pp. 6623-6635	<input type="checkbox"/>
		Erickson, "Optically Detected Multipulse Nuclear-Quadrupole-Resonance Studies of Trivalent Praseodymium in Zero and Weak Static Magnetic Fields," Physical Review B, Vol. 39, No. 10, 1 April 1989, pp. 6342-6347	<input type="checkbox"/>
		Singh and Armstrong, "Spin Thermodynamics Applied to Pure Nuclear Quadrupole Resonance for an Inhomogeneously Broadband Line in a Spin-3/2 System," Journal of Physics C: Solid State Physics, Vol. 19, 1986, pp. L221-L227	<input type="checkbox"/>
↓		Bai, et al., "Zeeman-Perturbed Spin-Echo FT NQR Spectroscopy," Journal of Magnetic Resonance Series A, Vol. 102, 1993, pp. 137-143	<input type="checkbox"/>

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/LMA/		Shastri, et al., "Distribution of Nonequivalent Aluminum Sites Revealed in Al-Cu-Ru and Al-Cu-Fe Quasicrystals by <sup>27</sup> Al NQR," Physical Review B, Vol. 50, No. 6, 1 August 1994, pp. 4224-4227	<input type="checkbox"/>
		Nickel and Kimmich, "2D Exchange NQR Spectroscopy," Journal of Molecular Structure, Vol. 345, 1995, pp. 253-264	<input type="checkbox"/>
		Kohori, et al., <sup>27</sup> Al NMR and NQR Studies of the Antiferromagnetic Superconductor UPd <sub>2</sub> Al <sub>3</sub> , Solid State Communications, Vol. 95, No. 2, 1995, pp. 121-126	<input type="checkbox"/>
		Peterson and Oja, "A Pulsed Nuclear Quadrupole Resonance Spectrometer," Advances in Nuclear Quadrupole Resonance, Vol. 1, ed. J.A.S. Smith (London: Heyden), 1974, pp. 179-184	<input type="checkbox"/>
		Ramachandran and Narasimhan, "A Coherent Nuclear Quadrupole Pulse and Double Resonance Spectrometer," Journal of Physics E: Scientific Instruments, Vol. 16, 1983, pp. 643-648	<input type="checkbox"/>
		Harding, et al., "A Pulsed NQR-FFT Spectrometer for Nitrogen-14," Journal of Magnetic Resonance, Vol. 36, 1979, pp. 21-33	<input type="checkbox"/>
		Hirschfeld and Klainer, "Short Range Remote NQR Measurements," Journal of Molecular Structure, Vol. 58, 1980, pp. 63-77	<input type="checkbox"/>
		Grechishkin, "NQR Device for Detecting Plastic Explosives, Mines and Drugs," Applied Physics A, Vol. 55, 1992, pp. 505-507	<input type="checkbox"/>
		Grechishkin and Sinyavskii, "Remote Nuclear Quadrupole Resonance in Solids," Physics, Uspekhi, Vol. 38, No. 10, 1993, pp. 980-1003	<input type="checkbox"/>
		Grechishkin, "Application of Multipulse Sequences in Remote NQR," Applied Physics A, Vol. 58, 1994, pp. 63-65	<input type="checkbox"/>
↓		Klainer, et al., "Fourier Transform Nuclear Quadrupole Resonance Spectroscopy," in "Fourier, Hadamard and Hilbert Transforms in Chemistry," A.G. Marshall, Ed. Plenum, New York, 1982, pp. 147-182	<input type="checkbox"/>

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/LMA/		Maricq, "Quasistationary State and its Decay to Equilibrium in the Pulsed Spin Locking of a Nuclear Quadrupole Resonance," Physical Review B, Vol. 33, No. 7, 1 April 1986, pp. 4501-4513	<input type="checkbox"/>
		Alexander and Tzalmona, "Relaxation by Slow Motional Processes. Effect of Molecular Rotations in Pure Quadrupole Resonance," Physical Review, Vol. 138, No. 3A, 3 May 1965, pp. A845-A855	<input type="checkbox"/>
		Carr, "Steady-State Free Precession of Nuclear Magnetic Resonance," Physical Review, Vol. 112, No. 5, 1 December 1958, pp. 1693-1701	<input type="checkbox"/>
		Osokin, et al., "The Quasistationary States in Multipulse NQR," Z. Naturforsch, Vol. 47A, 1992, pp. 439-445	<input type="checkbox"/>
		Osokin and Shagalov, "NQR Transient Nutation and Rotary Echoes in the Effective Field of Multiple-Pulse Sequences," Solid State Nuclear Magnetic Resonance, Vol. 10, 1997, pp. 63-72	<input type="checkbox"/>
		Liao and Zax, "Analysis of Signal-to-Noise Ratios for Noise Excitation of Quadrupole Nuclear Spins in Zero Field," Journal of Physical Chemistry, Vol. 100, No. 5, 1996, pp. 1483-1487	<input type="checkbox"/>
		Marino and Klainer, "Multiple Spin Echoes in Pure Quadrupole Resonance," The Journal of Chemical Physics, Vol. 67, No. 7, 1 October 1997, pp. 3388-3389	<input type="checkbox"/>
		Hitrin, et al., Pulsed Spin Locking Theory in Pure Quadrupole Resonance," Vol. 83, 1982, pp. 269-275	<input type="checkbox"/>
		Zussman, "Effect of Molecular Reorientation in Urea on the <sup>14</sup> N PNQR Linewidth and Relaxation Time," The Journal of Chemical Physics, Vol. 58, No. 4, 15 February 1973, pp. 1514-1522	<input type="checkbox"/>
		Bradford, et al., "A Steady-State Transient Technique in Nuclear Induction," Physical Review, Vol. 84, No. 1, 1951, pp. 157-158	<input type="checkbox"/>
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